



SEQUENCE LISTING

01100 Gen Therapeutics, Inc.
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01200 Transgenic Mammals Expressing Mutant GPIIIa

01300 44481-5043-US

01400 US 09/673,302

01410 2001-03-23

01500 PCT/US99/08285

01610 1999-04-13

01800 US 60/115,516

01810 1999-04-13

01900 3

01700 PatentIn version 3.1

02100 1

02110 762

02120 PRT

02130 Homo sapiens

02140

02150 misc_feature

02160 Glycoprotein IIIa

04000 1

Gly Pro Asn Ile Cys Thr Thr Arg Gly Val Ser Ser Cys Gln Gln Cys
1 5 10 15

Leu Ala Val Ser Pro Met Cys Ala Trp Cys Ser Asp Glu Ala Leu Pro
20 25 30

Leu Gly Ser Pro Arg Cys Asp Leu Lys Glu Asn Leu Leu Lys Asp Asn
35 40 45

Cys Ala Pro Glu Ser Ile Glu Phe Pro Val Ser Glu Ala Arg Val Leu
50 55 60

Glu Asp Arg Pro Leu Ser Asp Lys Gly Ser Gly Asp Ser Ser Gln Val
65 70 75 80

Thr Gln Val Ser Pro Gln Arg Ile Ala Leu Arg Leu Arg Pro Asp Asp
85 90 95

Ser Lys Asn Phe Ser Ile Gln Val Arg Gln Val Glu Asp Tyr Pro Val
 100 105 110

Asp Ile Tyr Tyr Leu Met Asp Leu Ser Tyr Ser Met Lys Asp Asp Leu
 115 120 125

Trp Ser Ile Gln Asn Leu Gly Thr Lys Leu Ala Thr Gln Met Arg Lys
 130 135 140

Leu Thr Ser Asn Leu Arg Ile Gly Phe Gly Ala Phe Val Asp Lys Pro
 145 150 155 160

Val Ser Pro Tyr Met Tyr Ile Ser Pro Pro Glu Ala Leu Glu Asn Pro
 165 170 175

Cys Tyr Asp Met Lys Thr Thr Cys Leu Pro Met Phe Gly Tyr Lys His
 180 185 190

Val Leu Thr Leu Thr Asp Gln Val Thr Arg Phe Asn Glu Glu Val Lys
 195 200 205

Lys Gln Ser Val Ser Arg Asn Arg Asp Ala Pro Gln Gly Gly Phe Asp
 210 215 220

Ala Ile Met Gln Ala Thr Val Cys Asp Glu Lys Ile Gly Trp Arg Asn
 225 230 235 240

Asp Ala Ser His Leu Leu Val Phe Thr Thr Asp Ala Lys Thr His Ile
 245 250 255

Ala Leu Asp Gly Arg Leu Ala Gly Ile Val Gln Pro Asn Asp Gly Gln
 260 265 270

Cys His Val Gly Ser Asp Asn His Tyr Ser Ala Ser Thr Thr Met Asp
 275 280 285

Tyr Pro Ser Leu Gly Leu Met Thr Glu Lys Leu Ser Gln Lys Asn Ile
 290 295 300

Asn Leu Ile Phe Ala Val Thr Glu Asn Val Val Asn Leu Tyr Gln Asn
 305 310 315 320

Tyr Ser Glu Leu Ile Pro Gly Thr Thr Val Gly Val Leu Ser Met Asp
 325 330 335

Ser Ser Asn Val Leu Gln Leu Ile Val Asp Ala Tyr Gly Lys Ile Arg
 340 345 350

Ser Lys Val Glu Leu Glu Val Arg Asp Leu Pro Glu Glu Leu Ser Leu
 355 360 365

Ser Phe Asn Ala Thr Cys Leu Asn Asn Glu Val Ile Pro Gly Leu Lys
 370 375 380

Ser Cys Met Gly Leu Lys Ile Gly Asp Thr Val Ser Phe Ser Ile Glu
 385 390 395 400

Ala Lys Val Arg Gly Cys Pro Gln Glu Lys Glu Lys Ser Phe Thr Ile
 405 410 415

Lys Pro Val Gly Phe Lys Asp Ser Leu Ile Val Gln Val Thr Phe Asp
 420 425 430

Cys Asp Cys Ala Cys Gln Ala Gln Ala Glu Pro Asn Ser His Arg Cys
 435 440 445

Asn Asn Gly Asn Gly Thr Phe Gln Cys Gly Val Cys Arg Cys Gly Pro
 450 455 460

Gly Trp Leu Gly Ser Gln Cys Glu Cys Ser Glu Glu Asp Tyr Arg Pro
 465 470 475 480

Ser Gln Gln Asp Glu Cys Ser Pro Arg Glu Gly Gln Pro Val Cys Ser
 485 490 495

Gln Arg Gly Glu Cys Leu Cys Gly Gln Cys Val Cys His Ser Ser Asp
 500 505 510

Phe Gly Lys Ile Thr Gly Lys Tyr Cys Glu Cys Asp Asp Phe Ser Cys
 515 520 525

Val Arg Tyr Lys Gly Glu Met Cys Ser Gly His Gly Gln Cys Ser Cys
 530 535 540

Gly Asp Cys Leu Cys Asp Ser Asp Trp Thr Gly Tyr Tyr Cys Asn Cys
 545 550 555 560

Thr Thr Arg Thr Asp Thr Cys Met Ser Ser Asn Gly Leu Leu Cys Ser
 565 570 575

Gly Arg Gly Lys Cys Glu Cys Gly Ser Cys Val Cys Ile Gln Pro Gly
 580 585 590

Ser Tyr Gly Asp Thr Cys Glu Lys Cys Pro Thr Cys Pro Asp Ala Cys
 595 600 605

Thr Phe Lys Lys Glu Cys Val Glu Cys Lys Lys Phe Asp Arg Gly Ala
 610 615 620

Leu His Asp Glu Asn Thr Cys Asn Arg Tyr Cys Arg Asp Glu Ile Glu
 625 630 635 640

Ser Val Lys Glu Leu Lys Asp Thr Gly Lys Asp Ala Val Asn Cys Thr
 645 650 655

Tyr Lys Asn Glu Asp Asp Cys Val Val Arg Phe Gln Tyr Tyr Glu Asp
 660 665 670

Ser Ser Gly Lys Ser Ile Leu Tyr Val Val Glu Glu Pro Glu Cys Pro
 675 680 685

Lys Gly Pro Asp Ile Leu Val Val Leu Leu Ser Val Met Gly Ala Ile
 690 695 700

Leu Leu Ile Gly Leu Ala Ala Leu Leu Ile Trp Lys Leu Leu Ile Thr
 705 710 715 720

Ile His Asp Arg Lys Glu Phe Ala Lys Phe Glu Glu Glu Arg Ala Arg
 725 730 735

Ala Lys Trp Asp Thr Ala Asn Asn Pro Leu Tyr Lys Glu Ala Thr Ser
 740 745 750

Thr Phe Thr Asn Ile Thr Tyr Arg Gly Thr
 755 760

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<223> Xaa can be any amino acid and may be present or missing

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Lys Leu Leu Leu Thr Thr His Asp Arg Lys Glu Phe Ala Lys Phe Glu
1 5 10 15

Glu Glu Arg Ala Arg Ala Lys Trp Asp Thr Ala Asn Asn Pro Leu Tyr
20 25 30

Lys Glu Ala Thr Ser Thr Phe Thr Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
35 40 45

Asn Ile Thr Tyr Arg Gly Thr Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
50 55 60

Xaa Xaa
65

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Lys Leu Leu Val Ser Phe His Asp Arg Lys Glu Val Ala Lys Phe Glu
1 5 10 15

Ala Glu Arg Ser Lys Ala Lys Trp Gln Thr Gly Thr Asn Pro Leu Tyr
 20 25 30

Arg Gly Ser Thr Ser Thr Phe Lys Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
 35 40 45

Asn Val Thr Tyr Lys His Arg Glu Lys Gln Lys Val Asp Leu Ser Thr
 50 55 60

Asp Cys
 61

C10 4
 C11 66
 C12 PRT
 C13 Mus musculus

C20
 C21 misc_feature
 C23 Segment of GPIIIa beta-1 subunit

C26
 C27 misc_feature
 C28 (41)..(66)
 C29 Xaa can be any amino acid and may be present or missing

C30 4

Lys Leu Leu Met Leu Ile His Asp Arg Arg Glu Glu Ala Lys Glu Glu
 1 5 10 15

Lys Glu Lys Met Asn Ala Lys Trp Asp Thr Gly Glu Asn Pro Ile Tyr
 20 25 30

Lys Ser Ala Val Thr Thr Val Val Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
 35 40 45

Asn Pro Lys Tyr Glu Gly Lys Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
 50 55 60

Xaa Xaa
 65

C210 5

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Ser Glu Arg Ser Arg Ala Arg Tyr Glu Met Ala Ser Asn Pro Leu Tyr
 20 25 30

Arg Lys Pro Ile Ser Thr His Thr Val Asp Phe Thr Phe Asn Lys Phe
 35 40 45

Asn Lys Ser Tyr Asn Gly Thr Val Asp Xaa Xaa Xaa Xaa Xaa Xaa Xaa
 50 55 60

Xaa Xaa
 65

<210> 6
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Lys Glu Lys Leu Lys Ser Gln Trp Asn Asn Asp Xaa Asn Pro Leu Phe
 20 25 30

Lys Ser Ala Thr Thr Thr Val Met Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
 35 40 45

Asn Pro Lys Phe Ala Glu Ser Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
 50 55 60

Xaa Xaa
 65

0210 7
 0211 66
 0212 PRT
 0213 Mus musculus

0220
 0221 misc_feature
 0223 Segment of GPIIIa beta-7 subunit

0230
 0231 misc_feature
 0232 (41)..(66)
 0233 Xaa can be any amino acid and may be present or missing

0400 7

Arg Leu Ser Val Glu Ile Tyr Asp Arg Arg Glu Tyr Ser Arg Phe Glu
 1 5 10 15

Lys Glu Gln Gln Gln Leu Asn Trp Lys Gln Asp Ser Asn Pro Leu Tyr
 20 25 30

Lys Ser Ala Ile Thr Thr Thr Ile Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
 35 40 45

Asn Pro Arg Phe Gln Glu Ala Asp Ser Pro Thr Leu Xaa Xaa Xaa Xaa
 50 55 60

Xaa Xaa
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0210 8

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Lys Leu Leu Val Xaa Ile His Asp Arg Arg Glu Phe Ala Lys Phe Glu
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Xaa Glu Xaa Xaa Xaa Ala Xaa Trp Xaa Xaa Xaa Xaa Asn Pro Leu Tyr
20 25 30

Lys Xaa Ala Xaa Xaa Thr Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
35 40 45

Xaa Asn Xaa Xaa Tyr Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
50 55 60

Xaa
65